

WAMBO PUTICASUS GEN. ET SP. NOV., A NEW RUTELINE FROM SOUTH QUEENSLAND (COLEOPTERA : SCARABAEIDAE)

P.G. ALLSOPP

Allsopp, P.G. 1988 11 7: *Wambo puticasus* gen. et sp. nov., a new ruteline from south Queensland (Coleoptera : Scarabaeidae). *Mem. Qd Mus.* 25(2): 255-258. ISSN 0079-8835.

Wambo puticasus gen. et sp. nov. is described from specimens collected in a pitfall trap near Dalby, south Queensland. It is closely related to *Anoplostethus* Brullé, *Epichrysus* White and *Paraschizognathus* Ohaus.

□ *Wambo*, Rutelinae, Scarabaeidae, Coleoptera.

P.G. Allsopp, Bureau of Sugar Experiment Stations, PO Box 651, Bundaberg, Queensland 4670; 28 October, 1987.

Carne (1958) last revised the Australian Rutelinae, placing most species in the Anoplognathini. He separated the two component subtribes, Anoplognathina and Schizognathina, on the presence or absence, respectively, of an anteromedian labial process which curves into the mouth cavity. The Anoplognathina comprise six genera, *Calloodes* White, *Repsimus* Macleay, *Anoplognathus* Leach, *Epichrysus* White, *Anoplostethus* Brullé and *Paraschizognathus* Ohaus. A further four species have since been added to *Paraschizognathus* (Carne, 1974; Allsopp and Carne, 1986a) and four to *Anoplognathus* (Carne, 1981; Allsopp and Carne, 1986b). The majority of Anoplognathina occur on or near the coasts and males are often attracted to lights. This paper describes a seventh genus from south Queensland.

ANIC = Australian National Insect Collection; QM = Queensland Museum.

Wambo gen. nov.

Type species: *Wambo puticasus* sp. nov.

DESCRIPTION

Male: Labrum with small anteroventral process contiguous with apex of labium. Clypeus (Fig. 1) transverse, length:width ratio 1:2.1, anterior margin more reflexed than lateral margins, lateral margins strongly anteriorly-divergent, dorsally glabrous; frontoclypeal suture distinct, with very slight posteriorly-directed median node. Frons (Fig. 1) setose, triangularly flattened. Mandibles without tooth at apex. Maxillary palps with terminal segment enlarged, dorsal surface with large oval sensorium. Labium with scattered long setae,

impressed at suture with submentum; mentum strongly pigmented at apex, forming small process curving into mouth cavity; labial palps small, sickle-shaped. Antennae 10-segmented, club 3-segmented, club shorter than shaft. Pronotum (Fig. 1) with posterior margin with single median lobe, disc glabrous. Elytra (Fig. 1) with intervals punctate, disc glabrous; epipleurae narrowly membranous, with lateral setae, posteriorly glabrous. Hind wings fully developed. Postcoxal process of prosternum short, broadly rounded with anterior longitudinal carina. Mesosternal process absent. Ventral thorax covered with abundant long setae. Fore tibiae 3-dentate; fore tarsal segments 1-4 *ca* as long as 5, without patches of specialised setae on segments 1-2; hind legs not enlarged; claws of all legs unequal, simple, the larger with weak longitudinal striation. Abdominal sternites setose. Pygidium densely setose, surface faintly transversely-wrinkled (difficult to see under setae).

Female: Unknown.

The generic name is of Aboriginal origin and is the name of the Shire in which the type locality of *W. puticasus* is situated. It is to be treated as masculine and acknowledges the interest in the area's fauna shown by the Lake Broadwater Natural History Association.

Wambo is most closely related to *Anoplostethus*, *Epichrysus* and *Paraschizognathus* in having the posterior margin of the pronotum rounded as a single lobe and a membranous border to the epipleurae, and in lacking a mesosternal process. *Wambo* differs from *Anoplostethus* in having the frons and lateral epipleurae setose, the antennal club longer relative to the shaft and a small, rather than a large and truncate, postcoxal pronotal

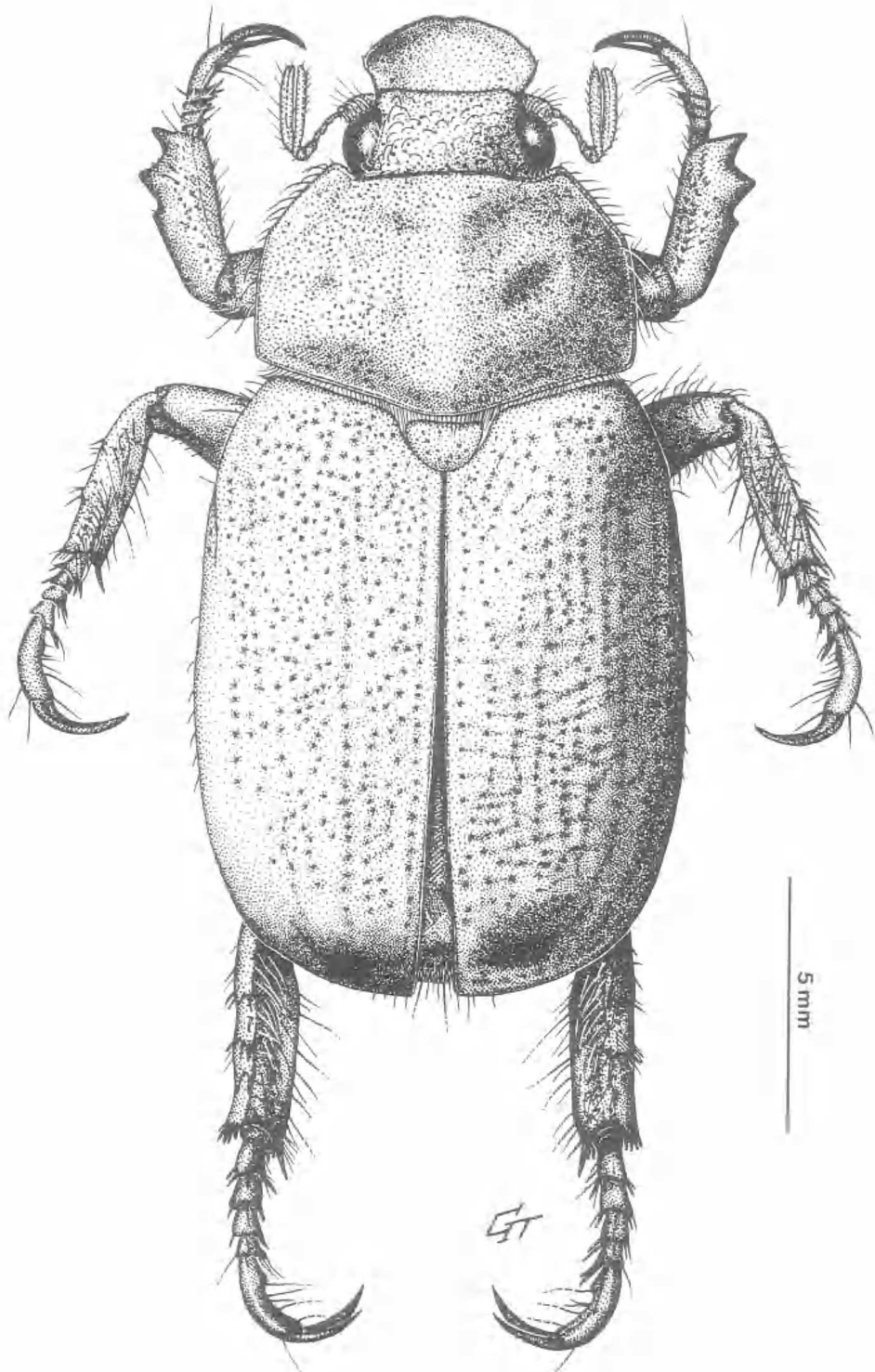


FIG. 1. *Wambo puticasus* gen. et sp. nov. holotype male: dorsal view.

process, and in lacking dense patches of specialised setae on tarsal segments 1–2 and either adpressed white scales or a dense patch of specialised setae on the mentum. From *Epichrysus*, *Wambo* differs in having a glabrous pronotum and a more transverse clypeus with anteriorly-divergent sides. The more transverse clypeus with divergent sides of *Wambo* also distinguishes it from *Paraschizognathus*. In Carne's (1958) key to the Anoplognathina *Wambo* will not key past couplet 4. It may be included in the key by deleting couplets 4 and 5 and substituting the following:

4. Epipleurae glabrous or with decumbent white setae at base; males with specialised setae in a patch on mentum and on underside of fore tarsal segments 1–2 (Carne, 1958, figs 15–16) or with adpressed white scales on lateral mentum *Anoplostethus* Brullé
Epipleurae with lateral setae; males without specialised setae or adpressed white setae on mentum or fore tarsi 5
5. Disc of pronotum setose *Epichrysus* White
Disc of pronotum glabrous 6
6. Clypeus twice as wide as long, sides curved, anteriorly-divergent (Fig. 1) *Wambo* gen. nov.
Clypeus less than twice as wide as long, sides slightly curved or straight, parallel or convergent (Carne, 1958, figs 19–20, 23, 25–31, 33; Carne, 1974, figs 2, 5, 14; Allsopp and Carne 1986a, fig. 1) *Paraschizognathus* Ohaus

Wambo puticasus sp. nov.

MATERIAL EXAMINED

HOLOTYPE: QM T10906 ♂, Lake Broadwater via Dalby, SEQ, 24.xi.1985–3.i.1986, Queensland Museum and M. Bennie, Pitfall traps (Site 6).

PARATYPE: Same data as holotype (1 ♂), ANIC.

DESCRIPTION

Male: Total length 18.4–18.7 mm.

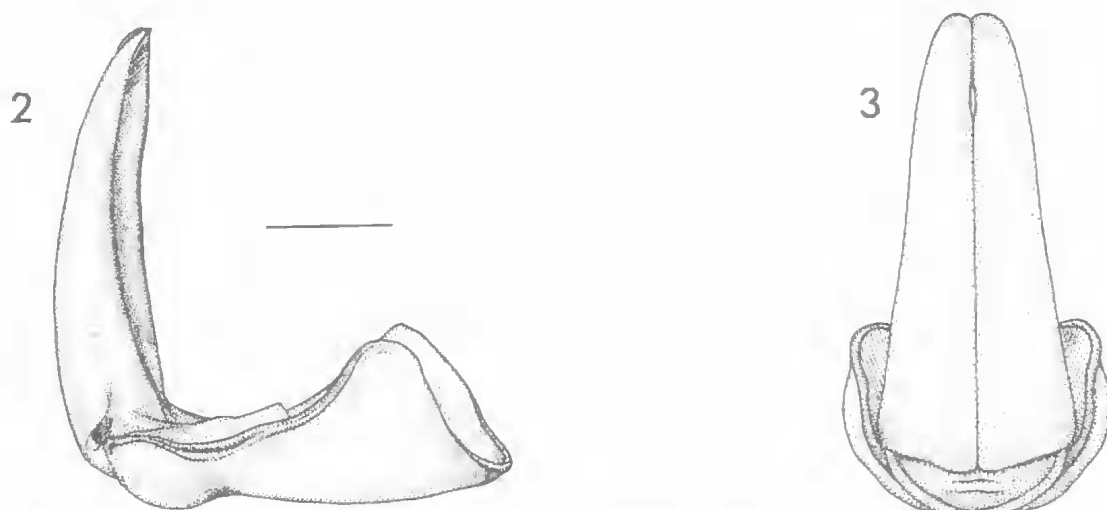
Clypeus, pronotum, scutellum, elytra, ventral thorax, femora and tibiae brown with green sheen, green sheen very pale or missing from some patches and replaced with red; frons darker green to blue with lighter green patches; pygidium, abdominal sternites and tarsi brown; antennae light brown; thoracic setae light yellow; abdominal setae white. Labrum with transverse row of setae. Clypeus (Fig. 1) with anterior margin rounded with slight median indentation;

anterior face with scattered long setae arising from punctures; dorsum with punctures, surface shagreened. Frons (Fig. 1) with long setae arising from punctures, setae less dense near posterior margin, surface shagreened; canthus crossing $\frac{1}{3}$ eye width, setose. Mandibles setose on lateral face and near apex. Maxillary palps with few long setae on segments 1–2, segment 3 with scattered minute setae. Labial palps with segment 2 produced around outer base of segment 3, apex of outer edge of segment 2 with long stout seta. Antennal shaft 1.2 times length of antennal club, scattered setae on both club and shaft. Pronotum (Fig. 1) with length:width ratio 1:1.6, few long white setae along posterior margin and few short white setae on anterior margin near angles, disc with scattered punctures denser anteriorly and near centre line, surface shagreened, anterior margin with groove continuing across middle, posterior margin with well-defined ridge continuing across middle, anterior angles slightly acute but rounded, posterior angles obtuse and rounded, lateral margins with broadly rounded angle anterior to mid-line. All coxae and femora with scattered long setae; fore tibiae with line of strong yellow setae in line level with outer edge of tarsi, shorter white setae between these and inner edge, inner margin with long yellow setae, outer portion with few medium setae and scattered minute setae; mid and hind tibiae with 1 strong carina and 1 less-defined carina; tarsi with lower surface of segments 1–4 with 2 strong spines, each of these segments more produced ventrally than preceding, segment 5 with ventral notch. Scutellum setose towards basal angles, scattered setose punctures towards apex, remaining surface smooth, apex rounded. Elytra (Fig. 1) with intervals punctate, surface transversely wrinkled, apices square; epipleurae with membranous border continuing to apices. Pygidium with dense decumbent white setae, scattered longer erect yellow setae towards lateral margins and apex. Aedeagal parameres (Figs 2–3) symmetrical, tapering towards apex, slightly and gradually reflexed backwards along length, setose on inner surface near apex.

Female: Unknown.

The specific name is a compound noun in apposition formed from the Latin *puteus*, a pit, and *casus*, a fall, and refers to the collection method.

Both specimens were taken in the one pitfall trap 2 km south of Lake Broadwater (G.B. Monteith pers. comm.). The trap was set in an



FIGS 2-3. *Wambo puticasus* gen. et sp. nov. holotype male: aedeagal parameres (scale line is 1 mm): (2) lateral; (3) dorsal.

area of deep sand dominated by *Lomandra* sp. (mattrush) and with mixed eucalypts and scattered cypress pine (*Callitris* sp.). Six other traps set in this area and 63 traps set in nine other vegetation types in the Lake Broadwater area and left in place for 15 months yielded no further specimens. As all traps were roofed, both specimens must have entered by walking. They were possibly on the ground searching for a pheromone-emitting female.

The absence of green pigment from patches of the dorsal surface and replacement with dark red is similar to the variation in colour found in *Anoplostethus roseus* Blanchard (Carne, 1958). Both specimens have been partially squashed in pinning, making an apparent deep re-entrant angle between the elytra appear as an artefact.

ACKNOWLEDGEMENTS

The specimens were collected during a survey of the Lake Broadwater Environmental Park being conducted by the Lake Broadwater Natural History Association and the Queensland Museum as an Australian Bicentenary Project. I

thank Dr Geoff Monteith and Mr Geoff Thompson, Queensland Museum for the loan of specimens and for the illustrations, respectively. Dr Phil Carne, CSIRO is thanked for his encouragement and advice.

LITERATURE CITED

- ALLSOPP, P.G. AND CARNE, P.B. 1986a. *Paraschizognathus marcus* sp. n. (Coleoptera : Scarabaeidae : Rutelinae) from south east Queensland. *J. Aust. ent. Soc.* 25: 95-7.
- 1986b. *Anoplognathus vietor* sp. n. (Coleoptera : Scarabaeidae : Rutelinae) from west Queensland. *J. Aust. ent. Soc.* 25: 99-101.
- CARNE, P.B. 1958. A review of the Australian Rutelinae (Coleoptera : Scarabaeidae). *Aust. J. Zool.* 6: 162-240.
1974. A review of the *olivaceus* species-group of the genus *Paraschizognathus* Ohaus, and description of three new species (Coleoptera : Scarabaeidae). *J. Aust. ent. Soc.* 13: 261-6.
1981. Three new species of *Anoplognathus* Leach, and new distribution records for poorly known species (Coleoptera : Scarabaeidae : Rutelinae). *J. Aust. ent. Soc.* 20: 289-94.